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2,736,598

DOOR CONTROL FOR REFRIGERATORS

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Fig. 1

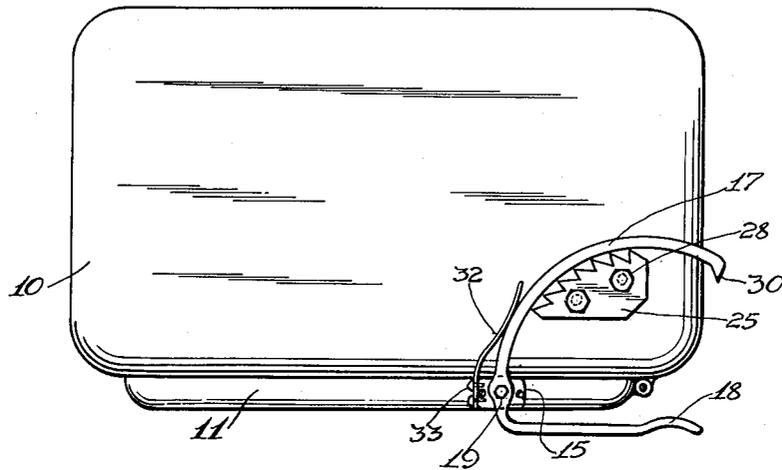


Fig. 2

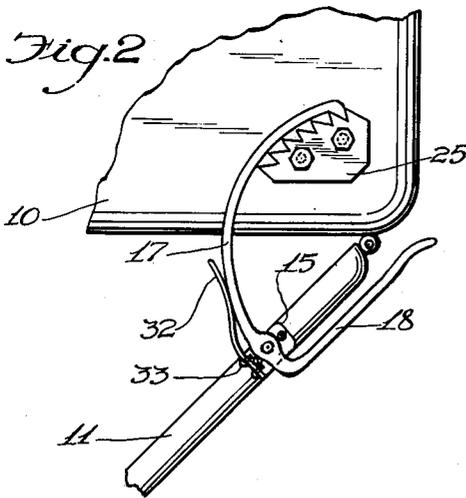
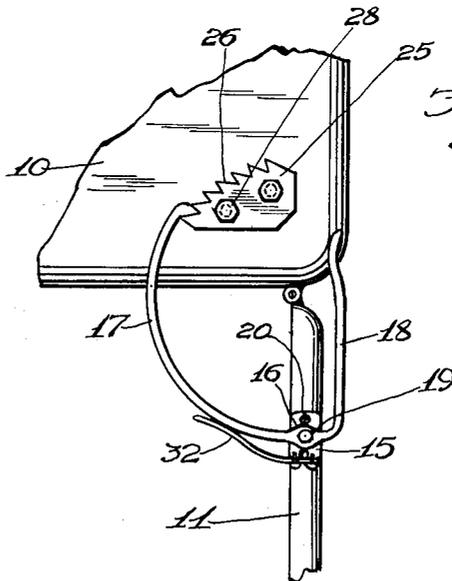


Fig. 3



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DOOR CONTROL FOR REFRIGERATORS

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1 Claim. (Cl. 292—338)

My invention relates to large or commercial refrigerators and like cabinets in which the doors are so massive that the momentum when they are pushed causes them to close into locked position, or where such doors are designed to close automatically. It has occurred at times that a young child gained access to the interior of the refrigerator and allowed the door of the same to close, with fatal results to the occupant. When such a door closes it locks, and many commercial refrigerators and cabinets do not contain a device on the inside for unlocking the door. However, the presence of such a device would not be an aid where the child locked in the refrigerator is so young as not to think of or look for a means of unlocking the door. In view of this situation, it is one object of the present invention to devise a means which prevents the closing of the refrigerator door unless an auxiliary external control is actuated.

A further object is to provide a device which can be actuated only from the outside of the refrigerator in order to close the door.

Another object is to mount the auxiliary control preferably on top of the refrigerator, so that it will be at a high and very remote point for the reach of a child attempting to enter the refrigerator while the same is open, or of another child nearby.

An additional object is to design the novel control along lines of simplicity.

With the above object in view, a better understanding of the invention may be had by reference to the accompanying drawing, in which—

Fig. 1 is a top plan view of a refrigerator equipped with the improved control when the door is in the closed position;

Fig. 2 is a similar fragmental view when the door is partly open; and

Fig. 3 is a similar view, showing the door fully open.

In accordance with the foregoing, specific reference to the drawing indicates the cabinet of the refrigerator at 10 and the door at 11. For the purpose of the invention, the door receives a plate 15 at the top, such plate carrying a fastener 16 extended with an arcuate pawl 17 on one side and a lever 18 on the other side. The fastener 16 is pivoted vertically on a bolt 19 secured in the plate 15; and the latter is attached to the door by screws 20 or other suitable means.

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The top of the refrigerator cabinet 10 receives a plate 25 formed with a series of ratchet teeth 26 at one side, such series being in an arcuate direction; and the plate 25 is fastened to the top of the cabinet by bolts 28 or other suitable means.

When the door of the refrigerator is closed, the pawl 17 extends around the rear side of the plate 25 and with its tooth 30 beyond the same; and it is pressed into engagement with the series of teeth 26 by a leaf spring 32 secured by bolts 33 to the door plate 15. When the door is swung open, such as to the position shown in Fig. 2, the pawl 17 is drawn to engage its tooth 30 with the first or second tooth of the plate 25, as shown; and, should the door be swung out to the wide-open position shown in Fig. 3, the tooth of the pawl 17 will have fallen into the last tooth of the plate 25, as shown.

With the door located in any open position, the engagement of the pawl 17 with the toothed plate 25 locks the door from closing of itself or being pushed into closed position. However, when this is desired, it is only necessary to push the lever 18 inwardly, this action causing the tooth 30 of the pawl 17 to recede from the plate 25 and permit the door to be swung closed.

It is now apparent that it is impossible for a child entering the refrigerator or other cabinet equipped with the novel control to close the door thereof without actuating the control. Obviously, the same is far out of reach to a child entering the refrigerator; and, being on top of the latter, it is too far for another child to reach without special effort or means, so that the door cannot be closed until an adult person arrives to actuate the control. The invention therefore has a large margin of safety, and may be depended upon to eliminate the danger first mentioned. Besides, the control is of a very simple nature, and may be produced and affixed at relatively small cost.

While I have described the invention along specific lines, various minor changes or refinements may be made therein without departure from its principle, and I reserve the right to employ all such changes and refinements as may come within the scope and spirit of the appended claim.

I claim:

In a cabinet having a vertically hinged door of the same height as said cabinet, a curved rack providing a plurality of ratchet teeth mounted on the top of said cabinet adjacent said hinged door, and a support mounted on the upper edge of said door adjacent said curved rack, the improvement of; a fastener pivoted to said support comprising an arcuate pawl at one end thereof and a laterally extending handle at the opposite end to release said pawl, said pawl having ratchet engaging means, and spring means carried by said support and maintaining said pawl in contact with said rack.

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